

ABSTRACT OF THE DISCLOSURE

A transfer case includes a two-speed range unit, a friction clutch, an actuation mechanism, and a control system. The actuation mechanism includes an electric motor, a geartrain driven by the motor, a range actuator assembly and a mode actuator assembly. The range actuator assembly includes a driveshaft driven by the geartrain, a cam driven by the driveshaft, and a shift fork having a follower retained in a groove formed in the cam and a fork engaging a shift collar associated with the range unit. The mode actuator assembly has a cam member with ramp surfaces and a control gear with rollers engaging the ramp surfaces. The control gear is rotatively driven by the geartrain. The cam member is axially moveable for controlling engagement of the friction clutch. An anti-rotation mechanism limits rotation of the cam member in response to continued rotation of the control gear.